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MEMORANDUM OF PLOT LOSSES

K.A. SALMAN
BERKELEY, CALIFORNIA
NOVEMBER 28, 1933

FILE COPY
FOREST INSECT LABORATORY
UNIVERSITY OF CALIFORNIA,
BERKELEY, CALIFORNIA.
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341 Giannini Hall, U.C.
Berkeley, Calif.
November 28, 1933

Mem. - Plot losses

Memorandum for Regional Forester:

In response to a request from Mr. Berry for data relating to insect losses in east side type stands, the accompanying listing of losses cruised on 320-acre plots during the period 1924-1933 has been worked up. Three Forests, the Modoc, Lassen and Plumas, are represented in the data. Township, range and section in which each plot is located are given, in order that loss information may be tied in with whatever stand information is available. Figures for losses in all years except 1933 show the loss on a per-section basis as a result of actual cruises on half sections. Figures for 1933 were secured from cruises and corrected for the date on which the cruise of each plot was made.

When losses for one year, or a few years, are given in the annual reports of forest insect surveys, there is little evidence presented of the continual drain being suffered by the stands. A preliminary paper showing just how much the losses are affecting the cash reserve of timber now mature and ready for cutting was written by Mr. McLees[1] in 1933 from data secured on R.S. 1, Modoc National Forest, by the Bureau of Entomology. He studied losses and increment on that plot for the period 1925-1930 inclusive and found that during the six years a net volume loss occurred of 404,580 B.M., or a net loss of 11.85% of the stand. If we base our conclusions on this evidence, it can readily be seen that with R.S. 1 representing about average conditions for the Happy Camp-Lava Beds area, we can visualize that the per year net loss in Government timber on the Badger area, as well as that in the fringe areas including those of the Lassen Forest, will be much greater than the 1.98% shown by an average stand.

I believe the accompanying table furnishes enough information to form the basis for an appreciation of the immense drain on what are considered to be valuable Government stands; but it fails to show the large amount of drain occurring in the small marginal basins of timber in the northeastern part of the state--basins not included in the main timber belts but nevertheless in the aggregate totaling a considerable acreage. In addition, the enormous drains in natural resources in the marginal timber stands along the front of the Sierra region are not included, though of almost equal importance.

K G Salman
Associate Entomologist.

[1] McLees, K.C. Relation of Timber Growth and Mortality Due to Insects in the Modoc National Forest. April 1933.

Copy to R.T. - annual interest - Dr. Barrett Berry 11/7

PER SECTION LOSSES RESULTING FROM FOREST INSECT INFESTATIONS - EAST SIDE TYPE STANDS

Name	Tp.	R.	Sec.	1924 Trees	1924 Vol.	1924 B.M.	1925 Trees	1925 Vol.	1925 B.M.	1926 Trees	1926 Vol.	1926 B.M.	1927 Trees	1927 Vol.	1927 B.M.	1928 Trees	1928 Vol.	1928 B.M.	1929 Trees	1929 Vol.	1929 B.M.	1930 Trees	1930 Vol.	1930 B.M.	1931 Trees	1931 Vol.	1931 B.M.	1932 Trees	1932 Vol.	1932 B.M.	1933 Trees	1933 Vol.	1933 B.M.	Average per Year Trees	Average per Year Vol.	Average per Year B.M.
Plumas Nat. Forest:																																			
Johnson Mill	26	14	13																								94	59,740		46	45,000		70	52,370	
Willow Creek	25	14	11,12																								200	208,700		208	208,200		204	203,450	
Murdock Crossing	26	13	16																								24	42,440		20	36,600		22	39,520	
Dixie Valley	24,25	14	1,36																								64	57,060		130	206,200		97	131,640	
Squaw Valley	25	13	16																								78	81,940		58	76,000		66	78,970	
Strip 6	26	14																									101	77,500		74	66,010		86	75,755	
" 7	26	14																									99	67,090		67	53,220		83	60,155	
" 8	26	13																									85	73,720		33	37,210		59	55,465	
" 9	26	13																									39	33,190		32	42,130		35	37,660	
" 10	25	14																									36	28,060		39	30,030		38	29,045	
" 11	25	13																									71	59,000		74	52,160		73	54,580	
										Averages of five 320-acre plots and six strips in Plumas Forest:-																81	71,042		71	77,087		76	74,065	
Lassen Nat. Forest:																																			
Cone Mountain	33	7	17																			28	30,500		44	64,460	104	169,310		55	77,525		58	85,450	
Patterson "	33	8	7																			34	51,900		98	101,980	162	213,000		84	75,530		97	110,620	
Harvey "	33	8	23							44	45,860		98	100,600		114	109,000		130	101,120		76	57,680		86	65,840	170	167,320		89	122,260		96	98,670	
Harvey "	33	8	24							38	47,860		70	79,740		124	132,420		122	120,380		82	88,340		104	126,240	196	219,280		80	96,410		102	101,320	
Crater "	32	8	21																20	14,700		60	80,420		50	58,000	92	100,760		43	50,750		53	60,930	
Moon Springs	34	5	2																						220	131,180	430	236,440		95	48,020		248	138,550	
Gordon Creek	33	10	9																26	20,040		22	28,820		42	45,000	98	87,200		46	64,000		53	49,010	
Dry Lake	33	9	11																						112	120,540	182	142,260		96	105,910		130	122,900	
Ashhurst Mountain	33	9	10																42	39,980		136	109,700		130	102,060	168	179,940		117	80,050		123	102,350	
Brockman Flat	32	10	28																32	25,320		86	53,260		130	80,440	170	130,720		47	27,900		89	64,130	
Poison Lake	32	7	18																						54	89,230	56	89,410		28	66,000		46	81,550	
Summit "	32	6	6																						24	61,700	28	57,820		32	61,710		28	60,410	
Willow Springs	35	6	23																						134	167,680	172	165,480		88	127,440		131	153,530	
Black's Lake	34	7	15																						98	130,550	120	172,040		117	170,850		112	157,810	
Averages of all plots, Lassen Forest - - - - - - - -										41	46,700		84	90,170		119	120,710		82	84,090		63	62,560		93	96,060	156	158,630		73	83,880			
Modoc Nat. Forest:																																			
R.S. Plot 1	43	7	22							132	120,330		322	246,960		538	315,020		266	187,400		86	75,640		86	91,360	220	238,320		324	240,070		82	76,940		228	176,670	
" 2	41	6	15										130	106,520		166	165,120		54	51,360		60	79,480		106	136,620	310	311,690		58	59,380		126	134,310	
" 3	42	7	28							178	162,060		488	422,300		452	281,320		230	142,700		82	73,460		34	29,460	80	63,260		178	177,160		64	54,220		198	156,220	
" 4	44	5	36		182	166,000		392	271,060		562	357,820		544	285,540		636	520,580		358	292,600		420	197,620		826	376,120		624	287,560		286	257,200		503	303,026	
" 5	44	8	16		20	25,220		94	72,600		316	185,840		1006	550,040		450	380,340		50	31,780		44	42,200		264	170,660		142	104,350		98	128,660		248	169,190	
" 6	41	5	19																				28	13,220		156	122,920		82	71,160		56	91,660		83	74,790	
" 11	46	15	8-5											310	315,320		72	80,920		42	42,920		66	53,170		170	104,160		284	290,870		54	32,120		142	140,170	
Eaakazore #1	41	8	4							156	126,780		140	117,060		142	112,500		94	82,940		96	94,500		52	26,760	122	106,680		236	151,120		44	42,660		120	95,910	
" 2	43	7	27																								166	144,360		242	207,640		82	76,220		163	142,740	
" 3	43	6	12																								170	147,300		232	193,460		156	187,960		187	182,910	
" 4	44	7	26																						54	47,480	128	106,180		336	231,440		112	116,260		156	125,340	
" 5	43	6	10							86	104,360		258	206,260		756	587,460		382	356,140		48	52,800		66	63,300	124	110,700		88	99,640		28	29,920		204	178,870	
" 6	44	8	35																						38	35,180	182	155,160		178	165,160		58	80,840		91	109,090	
" 7	44	8	13																						178	163,960	78	51,260		90	64,280		264	222,260		61	61,640		135	212,660	
" 8	42	6	15																														266	242,260		105	105,820		186	174,040	
" 9	40	5	12							122	174,300		204	284,200		200	265,980		166	340,820		80	96,100		50	64,480	156	187,120		190	284,900		no estimate			144	208,490	
Test #1	44	7	25																						44	30,560	176	136,700		318	281,900		104	107,820		161	139,250	
" 2	44	8	30																						24	23,760	198	176,380		222	249,400		94	127,660		135	144,310	
" 3	44	8	29																						46	46,329	208	164,540		142	133,940		82	91,940		120	109,190	
Averages of all plots, Modoc Forest - -				101	105,610		166	147,360		327	257,210		453	316,410		296	250,660		105	97,530		74	55,980		197	154,550	245	207,690		91	96,120				